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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,447	10/22/2003	Clement Hiel	CTC001-1	8095

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THE MCINTOSH GROUP
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EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/691,447

Applicant(s)

HIEL

Examiner

Jill M. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-156 is/are pending in the application.
- 4a) Of the above claim(s) 1-63,90-129 and 137-156 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 64-86,130,132-134 and 136 is/are rejected.
- 7) ☒ Claim(s) 87-89,131 and 135 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/29/04,3/25/04.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group III in the reply filed on July 11, 2005 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 64-66, 69-70, 72-73, and 76 are rejected under 35 U.S.C. 102(b) as being anticipated by Quigley, 5,540,870.

Quigley teaches a structural member of fiber reinforced composite material comprising a multi-ply tube or rod formed with an outer sheath of fiber reinforced thermoplastic material and an inner core material, also of fiber reinforced thermoplastic, as required by claims 64-66, 69-70 and 76. See abstract and Figure 2. The fibers can be carbon or glass and each layer can be formed from a thermoplastic resin, as required by claims 72-73.

Therefore, the prior art teachings of Quigley anticipate the invention as claimed in present claims 64-66, 69-70, 72-73 and 76.

- a. Claims 64-67, 69-70, 72-74, 76, 78-79, 81-82, and 84-86 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilemon et al, 6,568,072 B2 (Wilemon).

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Wilemon teaches a reinforced conductor core comprising a plurality of filaments encased in a polymer and a layer of carbon fibers coated with polymer surrounding the composite reinforced conductor, as required by claims 64-67, 69-70, 72-74, 76, 78-79, 81-82, and 84-86. See abstract, column 2, lines 19-26, and column 3, lines 52-56.

Therefore, the teachings of Wilemon anticipate the invention as claimed in present claims 64-67, 69-70, 72-74, 76, 78-79, 81-82, and 84-86.

4. Claims 64-65, 72-73 and 76 are rejected under 35 U.S.C. 102(b) as being anticipated by Snellman 3,717,720.

Snellman teaches a composite core for composite core reinforced cable, said composite core comprising an impregnated glass fiber cable. The cable comprises a plurality of individual glass fiber rovings twisted together which are impregnated with a resin, wherein additional layers are laid on the initial rovings in concentric layers as required by claims 64-65, 72-73 and 76. Therefore, the teachings of Snellman anticipate the invention as claimed in present claims 64-65, 72-73, and 76.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 67-68, 71, 75, 77-86, 130, 132-134 and 136 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quigley as applied above to claims 64-66, 69-70, 72-73 and 76.

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Quigley is as set forth above but does not specifically teach that the first layer is made from a first fiber and the at least one other layer is made from a second fiber. Nonetheless, Quigley teaches that the fiber materials that are employed in his invention include glass fibers and carbon fibers. See column 1, lines 45-49. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form a fiber reinforced composite material using a first fiber type for the solid core and a second fiber type in the surrounding concentric second layer commensurate with the desired properties of the end product. For example, it would have been obvious to use carbon fibers as the fibers of the inner core and glass fibers as the fibers of the outer surrounding layer (claims 67-68, 71, 75, 77-80, 82-86, 130, 132, and 134) to result in a composite core having enhanced properties of high tensile strength and flexibility. As to claims 133 and 136, since the composite core of Quigley uses fibers of the type contemplated by applicants, the examiner has reason to believe that the composite core of the prior art is capable of operating above 100° C, in the absence of factual evidence to the contrary.

Accordingly, the prior art teachings of Quigley would have rendered obvious the invention as claimed in present claims 67-68, 71, 75, 77-86, 130, 132-134 and 136.

Double Patenting

7. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

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A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

8. Applicant is advised that should claim 75 be found allowable, claim 77 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Allowable Subject Matter

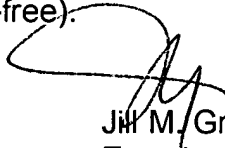
9. Claims 87-89, 131, and 135 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray
Examiner
Art Unit 1774

jmg